

## Abstract

Angular motion driving mechanism and gear wheel for use in such mechanism

5

Angular motion driving mechanism comprising, mounted on a supporting structure (SUP), a gear wheel (GW) for intermittent rotational movement in clockwise and counter-clockwise directions within an arc bounded by first and

10

second angular positions ( $\alpha_1$  and  $\alpha_2$ , respectively) of the gear wheel (GW) with respect to the supporting structure (SUP), a driving gear (DG) being drivingly coupled to the drive motor (DM) and to the gear wheel (GW) imparting

15

rotational movement to the gear wheel (GW) from said first to said second position ( $\alpha_1$  to  $\alpha_2$ , respectively) in an active mode of the drive motor (DM), a coiled torsion return spring (RS), which is flexed against its bias at rotational movement of the gear wheel (GW) from the first to the second angular position  $\alpha_1$  to  $\alpha_2$  in the active mode of the drive

20

motor (DM), and which relaxes in the non-active mode of the drive motor (DM) by urging the gear wheel (GW) to return from the second to the first angular position ( $\alpha_2$  to  $\alpha_1$ , respectively). To avoid damaging peak collision impact when stopping the gear wheel in its return swing at its first

25

angular position  $\alpha_1$ , the angular motion driving mechanism comprises a flexible end stop being constituted by a member (BT1) structurally fixated to the gear wheel (GW) and in said first position  $\alpha_1$  engaging with an first embossement (E1) of said supporting structure (SUP), said member (BT1) being

30

flexed at contact collision with said first embossement (E1).

Figure 1